October 20, 2016

Central Valley Regional Water Quality Control Board c/o: Jay Simi 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670-6114

Re: Comments on Clean Water Act, Section 303(d) 2014 Integrated Report for the Central Valley New Listings

Mr. Simi:

I am providing comments on the proposed new listings for the following water bodies:

- Jawbone Creek; Water Body ID CAR5364004020110207143809
- Jawbone Creek, unnamed tributary; Water Body ID CAR5364004020101020133452
- Bull Meadow Creek; Water Body ID CAR53640032201010201600009

These are all located in Tuolumne County, within the Stanislaus National Forest

My comments are on behalf of the William and Mary Crook family. We run cattle on a Stanislaus National Forest grazing allotment, private land leased from Sierra Pacific Industries adjacent to Forest Service lands, and on our own private property in the area. We have run an active cattle ranching operation since 1952, and have also continuously run cattle on the Forest Service allotment since 1965. Our family takes very seriously the task of maintaining sustainable multiple use ecosystems in the Stanislaus National Forest. The family cattle operation also includes our private ranch land in Groveland, California, and leased land in the San Joaquin Valley.

My specific background beyond being involved with the family cattle business includes a B.S. Degree from California Polytechnic State University with a major in Agricultural Business Management and a minor in Animal Science. I also have significant experience in regulatory compliance requirements gained during a 30 year career in the animal health industry. The animal health industry is highly regulated by the Food and Drug Administration. These regulations include compliance requirements for scientific data collection, summarization, and reporting.

Our family has major concerns about the data that is being used by the Central Valley Regional Water Quality Control Board to propose adding the water bodies sited to the 303(d) list, and data that is not being used in the Board's determination. My comments will address the following specific areas of concern:

- Water quality data collection and quality control concerns from the single source supplier used for the listing
- Potential inclusion of data from the single source data supplier that did not meet the August 30,
 2010 cut off point set by the Board
- Clear bias of the single source supplier of the data
- Concern about the Board not following the Water Quality Control Policy direction on inclusion of available data
- Lack of consideration of the Landscape impact on the area in question from the impact of the 2013 Rim Fire

Based on our comments that follow, we strongly feel that the data generated does not support the 303 (d) listings by the Board.

 Water quality data collection and quality control concerns from the single source supplier used for the listing

The Data Fact Sheets/Supporting Information states the data supplied by the single source supplier, Central Sierra Environmental Resource Center (CSERC) did not meet the Surface Water Ambient Monitoring Project (SWAMP) requirements. I make this conclusion because the Fact Sheets show next to the "SWAMP Data" standard line as "Non-SWAMP." The reason for the data supplied by CSERC being shown as "Non-SWAMP" is not stated. We feel the Board needs to indicate what deficiencies in the data or the CSERC Quality Assurance Project Plan occurred. On May 6, 2010, CSERC produced what appears to be a final version of a "Surface Water Ambient Monitoring Project in the Stanislaus National Forest Quality Assurance Project Plan" document, prepared by Lindsey Myers, staff biologist for CSERC. This is the CSERC plan followed to generate data for the water bodies in question. Erick Burres from the State Water Board is listed as a Technical Advisor in the SWAMP. Given that the Board apparently had an employee involved as an advisor, we feel it is important to see what input Mr. Burres had to the plan, and what, if any role he had in the determination that the CSERC data was "Non-SWAMP.

The CSERC May 6, 2010 SWAMP plan lists various personal and roles for the SWAMP, including the project manager, John Buckley, Director of CSERC, the Technical Leader, Lindsey Myers, also of CSERC, and Dr. Tom Hofstra, Columbia Community College, who is shown as the Quality Assurance Officer. The plan does not include information about the backgrounds, skills and experiences of the personnel involved in the SWAMP plan. Dr. Hofstra, the QA Officer, is a Doctor of Philosophy (Ph.D.), (Department of Ecology and Evolutionary Biology, University of California, Santa Cruz (UCSC), CA, June 2003.) No quality assurance academic training or experience is indicated for Dr. Hofstra. I could not find any scientific papers publicly available showing that Dr. Hofstra has been involved with research in a QA officer capacity. This is not to cast aspersions on Dr. Hofstra, but the apparent lack of specific training and experience should be considered with the quality of the data generated by CSERC. To provide a comparative perspective, FDA Compliance Studies for animals require a complete listing of all personnel involved and their backgrounds to help establish the competencies of the people involved in the entire study. This includes the very rigorous requirements for Quality Control and Quality Assurance capabilities.

There is limited information available to determine the qualifications of the CSERC personnel involved in the study. In 7.2 of the CSERC SWAMP, it states "All proposed project members already have the required basic training and no additional training is needed for this proposed project." Nothing is stated about what basic training has been provided. Since CSERC has reported water quality sampling results prior to the 2010 SWAMP, experiences from past studies, including deviations and corrective measures should have been mentioned and included in the 2010 plan. It would be hard to believe that past studies were perfectly run with no problems or errors. Annual training/retraining is a SOP for personnel involved with data collection, data entry, report generation, QA, QC, etc.

The CSERC SWAMP plan indicated that controls would be used in the study. The controls include Bourland Creek, sampled from the low end of Bourland Meadow, which is the headwater of the creek. The meadow elevation is 7323 feet. The Jawbone Meadow sample collection site is 5700 in elevation. That is a difference of 1623 feet. The Bull Meadow Creek site is 3800 feet in elevation, 3523 feet below the Bourland Meadow site. No information is provided in the SWAMP report to explain what impact the

difference in elevations would or could have on control samples compared to target site samples. No mention is made of the environmental fate of fecal indicator coliforms based on the elevation differences. Other meadows were available to use as controls closer to the elevations of the target sites.

Information is not provided on the water body flows encountered during the sampling period. Specific to the Jawbone Creek sample site, it is normal for the stream flowing out of Jawbone Meadow to dry up shortly after snow melts off. The stream flow turns to a trickle by mid-June, and usually is not running beyond that point. Isolated shallow pools and pockets remain until they completely dry up. Any FICs from deer, other wildlife, or cattle that may be deposited in these pools would result in high FICs, but would not be representative of the water body in question. This would also be very similar for the Bull Meadow Creek site. Being at a much lower elevation, the dry creek/isolated pool issue would occur much earlier, normally by early to mid-June.

Specific to the Jawbone unnamed tributary/Bogge Meadow site, the meadow management practice pursued by CSERC with the USFS created an artificial situation that concentrated cattle grazing at the target sample site. CSERC fenced this meadow after gaining agreement from the USFS to use as a control site for cattle grazing. By nature, cattle would circle the meadow looking for access to the meadow grass. It needs to be noted that the vast majority of cattle "grazing" in this range is browsing on brush, particularly Deer Brush (Ceanothus integerrimus.) Under normal conditions, cattle would graze the meadow and then move on. The fenced meadow created the artificial concentration of cattle around the meadow, which logically would result in higher concentrations of fecal matter. This resulted in creating the problem, then taking samples and then declaring that a problem exists.

To further cast questions about the data generated by CSERC as the single source provider of information, a comprehensive and much more thorough study was completed by the University of California, Davis including the Dept. of Plant Sciences, School of Veterinary Medicine, and Dept. of Land, Air and Water Resources, after CSERC began doing and reporting water quality study results. ("Water Quality Conditions Associated with Cattle Grazing and Recreation on National Forest Lands'" PLOS ONE, June, 2013.) This collaborative study that included USFS personnel, showed vastly different results compared to those of CSERC. We feel that, even though data generated after August 30, 2010 based on an arbitrary Board decision, cannot be used for the listing/delisting decisions, the fact that the UC Davis study does show significant differences to those of CSERC should be considered in evaluating the quality and validity of the CSERC data.

It also needs to be noted that the FIC were not DNA typed to determine the source. While cattle contribute feces, so do deer and other wildlife. Specific to the Bull Meadow Creek site, this area is a major winter/spring range for the Tuolumne Mule Deer herd. Large numbers of mule deer browse and graze in and around Bull Meadow. Specific to the Jawbone Meadow site, this also is a major migration route for mule deer moving up country in the mid spring timeframe. The herd migrates up to Jawbone Pass and disperses to the higher elevations.

We ask that the Board, in light of the information provided, should severely question the credibility of the data provided by CSERC that is being used for the listing decision.

2. Potential inclusion of data from the single source data supplier that did not meet the August 30, 2010 cut off point set by the Board

The September, 2016 Draft Staff Report states that "for consistency between Regional Water Boards, only water quality data received through August 30, 2010, were evaluated for this update." It is extremely difficult to determine what data (year), the Board staff is using to support the new 303(d) listings. Data sheets include data from 2009 and 2010. Multiple data sheets showed entry into a "dbase" on or around August 26, 2010. The data sheets do not indicate that the samples were entered into a Water Quality Control Board database. It seems safe to assume that the dbase shown on the datasheets is that of CSERC. It is not plausible that this data could be entered, put through a QA process, summarized and then provided to meet the August 30 cutoff. The CSERC May 6, 2010 SWAMP plan showed on page 9 that sampling would occur from May-August. Data analysis would begin in August and run through September, 2010. The final study report would be completed the end of September. If CSERC changed their timeline, what changes to the sampling plan/lab and data analysis was done? It would appear at best that data sent by CSERC to the Board was either not put through a QA process, or rushed through. In either case, it brings to question the validity of the data.

We respectfully request an audit of when CSERC data was received by the Board and that this information is provided to all stakeholders involved, including us. If CSERC did not meet the cutoff, then the data should be rejected for this listing cycle. If the information did not meet the cutoff, but is still to be used, then we feel it is only fair that the UC Davis study be included in the listing decision process.

3. Clear bias of the single source supplier of the data

It is well-known that the Director of CSERC, John Buckley has a strong bias against cattle grazing on forest lands. While we can provide multiple examples of his bias, we share one that specifically shows the CSERC Director's bias against cattle producers in a communication from him to the State Water Resources Control Board. In a letter dated December 14, 2009 to Gaylon Lee, P.G. with the subject being "Comments concerning the SWRCB Forest Plan WQMP strategy," Buckley made the following comments on a proposed stakeholder approach by the Board:

"It was frustrating at the November 30th workshop session to see what appeared to be a desire by the SWRCB to create a "Stakeholder Committee" that would be so dominated by the very dischargers that stand to gain the most from delaying effective monitoring and to gain the most from opposing a strong water quality management plan. Should a police department set up a Stakeholder Committee of child molesters, drug dealers, and robbers when strategizing where to enforce existing laws and how to accurately protect community citizens? Should any enforcement agency provide an opportunity for those creating the resource problem to significantly influence how regulations should be enforced or which should "not be given immediate attention?" It appears as if the collegial relationship between the U.S. Forest Service and the SWRCB extends even further so that the SWRCB is looking for guidance and input from the timber industry, grazing industry, the off-road-vehicle motorized advocacy groups, and other dischargers as well as the USFS that is so closely aligned with these user groups."

Calling people, including cattle producers like us, "child molesters, drug dealers and robbers," shows his level of bias, and his desire to take unilateral action. This type of statement cannot hide his extreme bias. Any statement from him that this belief does not, or did not cloud CSERC's data collection is not credible. And, if the leader harbors this level of resentment, it would permeate to those conducting the study under him as the Project Manager. Buckley's desire for unilateral action was demonstrated in his

refusal to collaborate and work with the UC Davis project when he was offered to be included. His harsh statement and his lack of interest in working in a collaborative effort brings into serious question the validity of the data provided by CSERC.

4. Concern about the Board not following the Water Quality Control Policy direction on inclusion of available data

We are concerned that the best available science is not being included in the listings involved in the Draft Staff Report. The Water Quality Control Policy, adopted September, 2004, Section 3 – California Listing Factors states "In developing the list, the state shall evaluate all existing readily available water quality-related data and information. The policy also sites in the WHEREAS section, 5, "The 2001 Budget Act Supplemental Report required the use of a "weight of evidence" approach in developing the Policy for listing and delisting waters and to include criterion to ensure that data and information used are accurate and verifiable." The policy reinforces using all existing readily available data and the weight of evidence direction in several other parts of the policy. Yet, counter to the Policy direction, an arbitrary cutoff that excludes existing readily available data and information, specifically the UC Davis study is not included in the listing process. This study also helps with the weight of evidence direction. Consistency of data submission desires should not be used as a reason to make a potentially wrong listing decision that can create long term harm for forest users like us.

5. Lack of consideration of the Landscape impact on the area in question from the impact of the 2013 Rim Fire

We feel it is an egregious error to move forward with listing these water bodies in light of the impact of the 2013 Rim Fire. All of the water bodies involved were directly affected by the Rim Fire. As a normal part of post fire recovery, brush, particularly Deer Brush (Ceanothus integerrimus) grows from the seed bed that is activated by fire. As stated earlier, Deer Brush is a major source of nutrition for cattle in the forest. The abundance of deer brush has increased dramatically since the Rim Fire compared to pre-fire levels. This has impacted cattle grazing behavior, including an increase in key grazing areas that results in even less cattle concentration that occurred before the fire. While grazing of riparian areas provides a very limited source of nutrition, these areas become even less important with the increased abundance of deer brush for browsing. While we strongly dispute the data generated by CSERC before the Rim Fire occurred, the grazing environment that existed then has been significantly altered. The grazing patterns have fundamentally changed since the fire. To ignore this new reality, and continue on with listing these water bodies, does not make scientific sense or logical sense either.

In conclusion, we feel that for the factual reasons given, that the Jawbone, unnamed Jawbone tributary and Bull Meadow Creek water bodies should not be added to the 303(d) list. We are very willing to work with credible groups to further assess water quality improvement opportunities in our part of the forest and to implement those improvements based on good science. Thank you for consideration of our comments and inputs.

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